

# Developing Public-Facing Language Products

Guidance from the 2020 Census Language Program

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# 1. Introduction

On August 11, 2000, Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency” directed each federal agency to “examine the services it provides and develop and implement a system by which LEP persons can meaningfully access those services consistent with, and without unduly burdening, the fundamental mission of the agency.” Under the executive order, federal agencies are responsible for providing Limited English Proficiency (LEP) individuals and/or the communities they serve with meaningful access to information and materials.

The Decennial Census Program at the U.S. Census Bureau has been providing non-English language support that predates the executive order. Research shows that limited-English-speaking households are one of the hardest to reach and hardest to count population groups during census enumeration operations. Over the decades, it has been crucial for the Census Bureau to provide non-English support to help reduce language barriers for households responding to the census.

For the 2020 Census, the Census Bureau built a language program that was a significant expansion of previous censuses. The program provided an opportunity for people to respond online or over the phone in English and 12 non-English languages. Respondents also had access to video and print guides in English and 59 non-English languages. These materials supported the language needs of over 99 percent of all U.S. households. For languages beyond these 59 supported languages, we provided a template of the language guides to help language communities create additional versions of the guides.

The diagram in Figure 1 below is a visualization of the languages supported in the 2020 Census. Note that the largest number of translations were completed in Spanish, followed by the other non-English languages supported online and over the phone (Chinese, Vietnamese, Korean, Russian, Arabic, Tagalog, Polish, French, Haitian Creole, Portuguese, and Japanese). Additional languages shown were supported through video and print language guides.

**Figure 1: 2020 Decennial Census Program Non-English Language Support**



The Census Bureau undertook two major actions to achieve this significant expansion of language support in 2020:

- Creating a brand-new translation office, solely dedicated to translation and review of non-English materials, and recruiting professionals from the translation industry.
- Commissioning the Language Services operation (one of the 35 operations of the 2020 Census) to oversee the creation, testing, and deployment of respondent-facing non-English materials.

For more information, see [2020 Census Language Resources](#).

## 2020 Insights

During the 2020 Census, the Census Bureau provided an opportunity for respondents to respond online or over the phone in English and 12 non-English languages.

- The internet questionnaires included translations of more than 16,000 words in each of the 12 non-English languages.
- When respondents called to complete the census by phone, each non-English language had a dedicated phone number.

The Census Bureau also provided both video and print language guides in 59 non-English languages.

- Video guides were narrated in 59 non-English languages and assisted people completing the internet questionnaire.
- Print guides were written in 59 non-English languages and assisted respondents completing the paper questionnaire.

For languages beyond these 59 supported languages, we provided a template of the language guides to help language communities create additional versions of the guides.

### 1.1. Purpose of this Handbook

The 2020 Census language program was successfully executed and became the most robust language program ever built for the decennial census. The program translated over 7 million words for more than 2,500 projects. These translations were high-quality, accurate, consistent, and completed on schedule. Final translations reached millions of households across the nation, providing them with critical information about the census.

Since the non-English materials were published, we have been invited to speak at different venues about the design and implementation of the 2020 Census language program. The presentations were well received, and many attendees asked for additional guidance. As a result, we developed this guide to share detailed information about the best practices implemented at the Census Bureau. These findings and recommendations are based on the experience of developing public-facing language products for the 2020 Census and may not be applicable to all organizations or projects. We encourage those with

expertise in developing language products for additional industries and purposes to consider sharing their best practices as well.

At the Census Bureau, we are dedicated to continuous improvement of non-English language support. We are currently evaluating 2020 Census operations, and identifying opportunities to improve the public-facing products that will be developed for the 2030 Census. We will continue to refine our processes throughout the next decade, and may issue new versions of this guidance if we determine that we have new insights to share.

## **1.2. Acknowledgments**

The following individuals are the leads of the 2020 Census language program and authored this handbook:

- Jennifer Kim, Assistant Division Chief for Content, Translation, Puerto Rico and Island Areas Operations
- Jason Kopp, Chief of Decennial Translation Branch
- Marisa Hotchkiss, Chief of Content, Translation, and Data Products Branch

The 2020 Census language program is under the direction of:

- Albert E. Fontenot Jr., Associate Director for Decennial Census Programs
- Deborah M. Stempowski, Assistant Director for Decennial Census Programs

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## 2. Preparation

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### 2.1. Designing a Language Product

In order to design high-quality translated products, you must envision the end result and begin with thorough planning. Plan the design of the product and processes you will need to create it. Consider the following key questions:

- What is the goal?
- Who is your audience?
- Which languages will be supported?
- What will be translated?
- How will the intended audience find and use translations?

In this section, we will go over each of these questions and discuss how they will guide the planning process.

#### 2.1.1. *What is the Goal?*

A new language product should meet a need for information that is not met by products in English. The first step is to determine what the new product will accomplish. Examples of some 2020 Census language product goals are included below:

- Provide an opportunity for people in limited-English-speaking households to respond to the 2020 Census on their own.
- Assist people completing the internet questionnaire by providing basic information about the 2020 Census, a tour of the internet questionnaire, and detailed translations of the screens.
- Provide bilingual census staff with professional translations of key census terms.

#### 2.1.2. *Who is Your Audience?*

It is important to understand the audience you are trying to reach with your translations and design a product that meets their needs. Think about the audience early to avoid replanning later. You may discover it is better to design separate materials for different audiences. You may also need to conduct additional research to learn about your audience. You can use data about the [languages people speak](#), such as the language data available at [data.census.gov](https://data.census.gov), consult experts, or research what similar organizations are doing.

## 2020 Insights

Our audience for 2020 Census language support was households with language need—those that may experience language barriers and need support to complete the 2020 Census.

To identify language needs, we used estimates of limited-English-speaking households in the United States. A limited-English-speaking household is a household in which no one 14 years old or over speaks only English or speaks English “very well.” Data about limited-English-speaking households comes from the American Community Survey (ACS).

After monitoring these data throughout the decade, the final list of languages was created using tabulations of languages spoken by at least 2,000 limited-English-speaking households nationally. The national list was also compared with regional and state-level data to ensure top language needs for each region and state were addressed.

These data also informed research within language groups. For example, after we identified a need for Portuguese support, we needed to decide whether to support Brazilian or European Portuguese. The program looked at place of birth data (also from the ACS) and determined that our audience included more speakers of Brazilian Portuguese.

### **2.1.3. Which Languages Will Be Supported?**

It is crucial to establish 1) which languages will be supported and 2) the level of support that will be provided for each language. Determine whether the materials will target audiences at the national, regional, state, or local level. Then research language needs at that level.

Language needs and linguistic diversity will vary in different parts of the country (and/or by audience). Use reputable and reliable data to determine the needs of your target audience. The Decennial Census Program used American Community Survey (ACS) language data when determining the supported languages for the 2020 Census. Additional details can be found in [Memorandum 2018.06: 2020 Census Non-English Language Support](#).

After generating the list of supported languages, determine if translation is feasible for those languages. Verify that there are qualified, professional translators available in those languages, and ensure they are appropriate for your language product. If your product has written text, ensure you have identified the written form of the language that should be used. If a language has multiple written forms, you need to decide which writing system(s) to support.

If a language has multiple dialects, avoid regionalisms and use terms that will be understood by most of the audience.<sup>1</sup> Make these determinations during the planning stage to yield high-quality translated products and avoid rework.

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<sup>1</sup> An exception to this rule is for products used only at a local level. You may prefer to use a specific local term if the translations will be used in only one location where a specific local term will be better understood.

### 2.1.4. ***What Will Be Translated?***

After determining which languages will be supported, it is important to identify the text that will be translated. Translation takes time and resources. Before starting translation, ensure the English text is final and will not change. Changes made during the translation will drive up cost and increase the probability of errors.

Does the text you wish to translate already exist in English? If not, you will need to first create the English text. If a text already exists in English, you need to review the text to ensure it is appropriate for translation. Consider the following when writing and editing a text for translation:

- ***Use plain language.*** Avoid buzzwords, technical jargon, clichés, metaphors, idioms, and cultural references that may not translate well into another language. Keep language simple and direct to ensure the reader will understand the text in English and when translated.
- ***Avoid long noun strings.*** A noun string is a group of words sandwiched together to form a noun (e.g., “the field operation supervisor crew training manual”). The relationship between each word in a long noun string will not always be clear to the reader. Eliminate words that aren’t necessary and use articles/verbs to clarify (e.g., “the manual that field operation supervisors use to train crews”).
- ***Be consistent.*** Use one word or phrase per concept and standardize text when possible. Using too many synonyms can confuse the reader. You will save money, and translation will take less time with consistent phrasing and terminology.
- ***Use visuals.*** Sometimes the best way to communicate information is with a photo, diagram, chart, or map. Use of images can shorten your text and make a translator’s job easier. However, verify that the image has a universal meaning. Some images do not convey the same meaning in all cultures.

Next, determine exactly what your final product will be and how it will be used. Will you create a commercially printed file or a digital file for users to print at home? Will you create an audio or video file? Will your translation include pictures or graphic design? The final format will affect the way your English text should be written and formatted and will determine the skill sets you require for your translation team.

### 2.1.5. ***How Will the Intended Audience Find Translations?***

Once you have decided on the format for your final product (e.g., printed, electronic), think through how you will deliver the product to your audience. This may highlight important questions or obstacles that change your design plans. The following are some questions to consider:

- ***How will your audience know the non-English content is available?*** Do you need to contact your audience through mail, advertisements, or other means? Do you need text or links on English-only webpages that direct your audience to non-English content?
- ***How will the audience receive printed materials?*** Will they be mailed, available for pickup at certain locations, or provided by someone else? Are any additional products or translations needed, such as envelopes or signs?

- **How will the audience access electronic materials?** Will they be available through a website, software tool, or application? If so, are there any limitations to the design, such as small screen sizes, available fonts, or character limits?

### **2.1.6. Will People Read the Translations or Hear Them?**

Knowing whether your audience is reading, viewing, or hearing the non-English content will help translators make informed decisions as they write and format the translations.

When text is read by your audience, you can use formatting and design tools to emphasize important messages. For example use a large font size, underlining, or color to draw attention to those messages. If you use formatting for emphasis, be aware that you may need to adapt formatting choices for non-English languages. For example, italics may make some languages, such as Arabic, difficult to read.

If your audience will hear the translation—such as video narration, radio advertisement, script read by a customer service representative—you will need to consider two different groups: 1) the person who will read the translation aloud, and 2) the audience that will hear the translation. Develop a translation that is easy to read aloud and clear to the audience hearing the translation. Table 1 below shows some notional examples of how the text should differ for written translations versus translated scripts.

**Table 1: Notional Differences Between Written and Spoken Text**

<b>Text for a Document (To Be Read)</b>	<b>Text for a Script (To Be Read Aloud)</b>
Welcome to the 2020 Census	Welcome to the Twenty-Twenty Census.
Respond by April 1.	Respond by April first.
Name:	Enter your name.
1. Open a new browser.	First, open a new browser.
2. Visit <a href="https://www.census.gov">www.census.gov</a>	Second, visit w-w-w-dot-census-dot-gov.

Also think carefully about the tone of the message. For example, a message warning people about an important safety concern should sound more formal and serious than an advertisement for an upcoming social event. On the other hand, a customer service representative that sounds overly formal and robotic may seem less authentic.

## **2.2. Preparing for Translation**

Now that you have a clear vision for the product, you are ready to start thinking about how the translations will be produced. In this section, we will discuss the roles and responsibilities within the translation team and the processes the team will follow to produce high-quality translations.

### **2.2.1. Build the Team**

The first step to prepare for translation is to ensure you have the appropriate team members. When people think about a translation team, they often think of translators only. Translators are expert linguists who specialize in reading a message in one language and writing that message in another

language. A translation project will not be successful without selecting qualified, professional translators. However, there are other key team members you will need for a high-quality translation. In this section, we will discuss the roles and qualifications of each team member.

**Note:** You may be aware that some software programs advertise the ability to translate words. It might be tempting to use these programs, known as machine translation, to save money and time. However, we do not recommend replacing human translators with machine translation when creating public-facing materials. Machine translation alone may not appropriately render context or nuance, changing the meaning of the text. It is essential to use professional translators as explained below.

### ***2.2.1.1. Translation Project Managers***

In order to complete a successful translation project, a strong translation project manager is critical. The translation project manager is responsible for documenting all project requirements and ensuring they are met. For translation work, the project manager must be familiar with the translation process, any software used to manage translation projects and databases, and project management best practices.

To ensure they fully understand translation issues, translation project managers should have a background in translation and ideally, experience as a translator. In addition, translation project managers should have experience managing complex translation projects and applying project management principles to their work.

Knowledgeable translation project managers will ask critical questions during the planning phase to properly document requirements and will quickly identify and resolve workflow issues affecting translation. If your translation project manager is working with a contractor who manages translation requests, it is important that the translation project manager provided by the contract also meets these requirements.

### ***2.2.1.2. Translators and Reviewers***

Professional translators and reviewers are critical team members. Translators read the source text and complete the initial draft of the translation. At the Census Bureau, translators must possess at least one of the following minimum requirements:

- A university-issued degree or certificate in translation in the language combination and direction required.
- Accreditation by a professional translation association or union, such as the American Translators Association (ATA) or other translation accrediting authority in the language combination and direction required.
- At least three years of professional experience in a staff position or for a full-time freelance practice dedicated to translation, completing work in the language combination and direction required.

In addition to this experience, the translator should demonstrate professional subject-matter experience in the topic(s) that will be translated. For example, if you are translating health care information, you should engage a translator with subject-matter expertise in health and medical terminology.

Following a standard workflow, a reviewer is a second translator who will compare the original text with the initial translation to validate accuracy. When possible, a reviewer should have professional experience performing editing and proofreading of translations in the language combination they will work in, in addition to their qualifications as a professional translator.

Translators and reviewers may also adjudicate feedback received from other team members (e.g., quality monitors, subject-matter experts, non-English product developers) and make updates when necessary. Additional information about the feedback process is provided in Section 3.3 of this document.

### ***2.2.1.3. Quality Monitors and Subject Matter Experts***

Quality monitors conduct quality checks on translated materials. Ideally, quality monitors can read and fully comprehend translated text in the language they are assigned. At a minimum, quality monitors must be familiar enough with a language to properly identify quality issues they are assigned. For example, they may ensure required terminology is used, requested updates have been made, and translations are not missing. Quality monitors are not professional translators and do not make changes to translations. Quality monitors flag potential issues noted during the quality check for adjudication by the translator and reviewer.

Subject-matter experts provide feedback on the final product being developed in the translated language. These individuals may include experts that created the English source document that is being translated, experts on existing translations in the target language, and experts that understand how the translation will be used. If a subject-matter expert will provide feedback on translated text, they must have documented professional experience providing feedback for that language. Subject-matter experts are not professional translators and do not make changes to translations. Subject-matter experts flag potential issues for adjudication by the translator and reviewer.

### ***2.2.1.4. Non-English Product Developers***

Non-English product developers specialize in the creation of the final product in non-English languages. For example, a non-English product developer may specialize in graphic design work, software development, or in the creation of subtitles. Non-English product developers ensure translations display properly in the final product. Your team must include non-English product developers if the final translated product will include a user interface, graphic design work, or video files. Non-English product developers are not professional translators and do not make changes to translations.

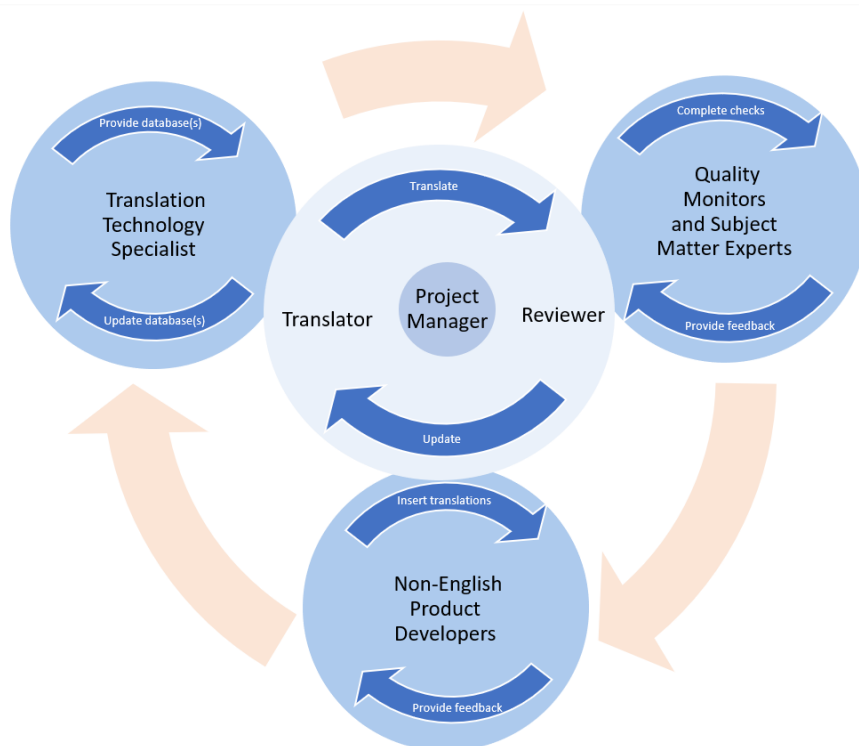
### ***2.2.1.5. Translation Technology Specialists***

Translation technology specialists maintain databases that assist with translation: translation memories (databases of previously translated materials) and termbases (databases of approved terminology). These databases help translators by automatically checking that they are using approved terminology and maintaining consistency with previous translations. Regular maintenance of databases is critical to ensure translators have access to current, approved content. For example, if a translator/reviewer

updates a translation based on feedback from quality monitors or subject matter experts, the updated translation and any terminology changes must be recorded in the databases.

The diagram below (Figure 2) is a visualization of interactions between translation team members. Note that the project manager is responsible for communication and file movement/management among all team members.

**Figure 2: Translation Team Member Relationships**



Your translation team may not have all the roles listed in this section. For example, if you are only creating plain-text translations, you will not use non-English product developers. In the next section we discuss documenting the process you will use to create your non-English products. You must have team members qualified to complete each step in your process to create a high-quality translation.

## 2020 Insights

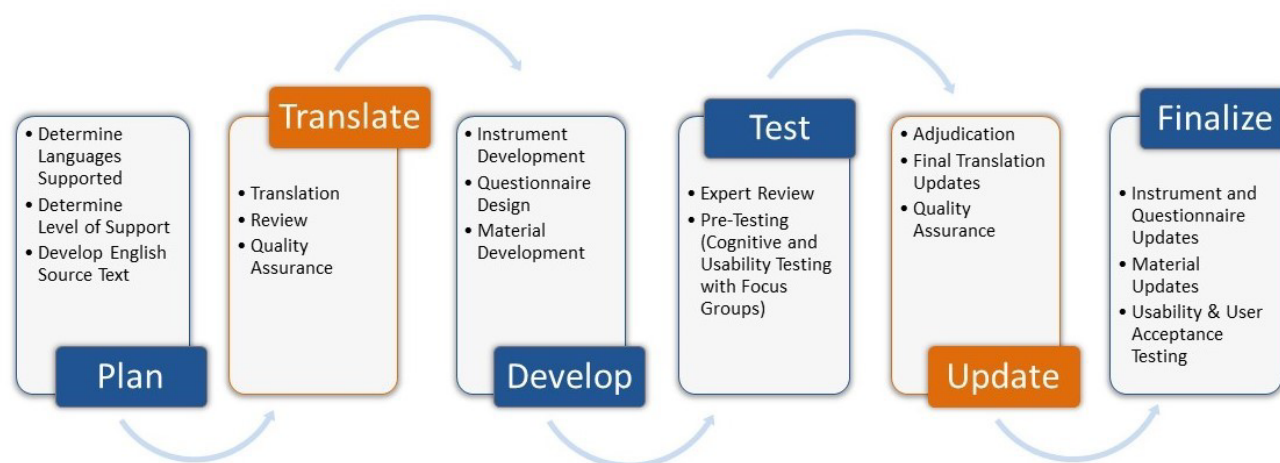
One of the major recommendations for the 2020 Census was to create a centralized clearinghouse for translation. Early in the decade, the Census Bureau examined industry best practices and consulted with other federal language and translation teams. The Census Bureau then recruited translation experts and experts in translation planning and translation technology, and formed the Decennial Translation Branch in 2016.

Through this branch, the Census Bureau ensured there were qualified staff in each of the roles described in section 2.2.1. These experts standardized the translation process and requirements (described in the next section), which ensured consistent terminology, style, and quality among translated products.

### 2.2.2. Develop the Process

Just as you must select the appropriate members for the translation team, you must also define all steps of the translation workflow. Defining processes in advance is critical to translation quality. Below is a translation workflow that was used to create non-English materials for the 2020 Census. In this section, we will review each phase critical to the creation of high-quality, non-English products. Note that you may have additional steps, depending on the type of final product you are creating (e.g., automated instrument, video with voice-over or captions, etc.).

**Figure 3: 2020 Census Translation Workflow**



#### 2.2.2.1. Plan

The first phase in any translation workflow is planning. Thorough planning is critical in achieving a high-quality final product. At a minimum, planning should include the following:

- Developing the English source text.
- Determining the languages supported (e.g., dialect, terminology, etc.) and final product format.
- Documenting all processes (workflow steps).

- Defining the project environment (workplace location, reference materials, required terminology, style guidance, and technology).
- Providing guidance on other requirements (schedule, format, etc.).

For additional information on the various aspects of planning, see *ASTM F2575-14 Standard Guide for Quality Assurance in Translation*, which provides a framework for planning translation projects labeled as the “Specifications Phase.”

## 2.2.2.2. Translate

Once a plan has been documented, the next phase is translation. The standard process for a high-quality translation involves three steps: translation, review, and quality assurance. A professional translator completes the first draft of a translation. Next, a second translator reviews the file, comparing the original text with the translation to validate accuracy, making edits as necessary. Finally, a quality monitor completes quality checks on the reviewed translation as part of the quality assurance process. Since the quality monitor is not a translator, any items the quality monitor flags as problematic are returned to the translator/reviewer to adjudicate and finalize the translation. See Figure 4 below for a screenshot of a sample quality assurance checklist.

**Figure 4: Extract from the Quality Assurance Checklist for 2020 Census Print Language Guides**

Item	Checked (X)	Questions / Comments
<b>1. PUNCTUATION</b>		
1.1 Ensure all punctuation is: <ul style="list-style-type: none"> <li>• <b>Grammatically correct.</b></li> <li>• <b>Appropriate</b> for the target language.</li> </ul> <p><b>Note:</b> Punctuation conventions may differ from English, so ensure you are using the conventions of the target language rather than English.</p>		
1.2 Ensure punctuation has been used to <b>enhance readability</b> . <ul style="list-style-type: none"> <li>• <b>Note:</b> It is acceptable to have broken a single source sentence into two sentences in order to improve clarity and readability.</li> <li>• If there are multiple clauses within a sentence, ensure the appropriate connecting punctuation has been used (commas [,], semicolons [;], colons [:], m-dashes [—], n-dashes [–], etc.).</li> <li>• However, for <b>bulleted lists</b>: make sure the number of bullet points from source to target has not been changed; the number of bullet points should match from source to target; the text within bullets should match alignment from source to target.</li> </ul>		
1.3 Ensure that ending punctuation is used to complete a thought.		
1.4 Make sure questions are phrased as questions and include correct ending punctuation (question marks: ?). <ul style="list-style-type: none"> <li>• If the target language uses specific punctuation to begin a question (e.g., Spanish: ¿), ensure this punctuation is present.</li> </ul>		

In addition to documenting each step of the translation process, it is important to plan for logistics of each phase, answering questions such as those below:

- **Translation request.** Who will send the request? What information must be contained? Who will provide a cost and time estimate? Who will approve the estimate?
- **File management.** Who will send the files? How will the files be sent? What file type(s) will be used? How will progress be monitored? How will the translator be made aware of changes made during review?
- **Change management.** How will changes to the source text or target text be tracked? How will files be named to indicate version control? How will final, approved translations be incorporated into translation databases (translation memory and termbases)?

Identify the answers to these questions and incorporate them into your overall translation workflow. Share this information with the translation team prior to the start of the translation project. Clear understanding of all steps and who is responsible will save the time and allow translators to focus on translation.

### **2.2.2.3. Develop**

In the development phase, the translated text is placed into the final format (e.g., into a mobile app, website, brochure, etc.). Incorrectly transferring translated text between programs and formats can lead to illegible, improperly displayed, or missing text. In the develop phase, translators and/or reviewers will need to work closely with non-English product developers to ensure all translations are included, visible, and properly formatted. More detailed guidance is provided in Section 4.1 and 4.2.

### **2.2.2.4. Test**

Non-English products should be tested to validate their effectiveness—in other words, how well they accomplish their intended purpose for the intended audience. Similar to other team members, testers do not change translations. They provide recommendations and feedback to a translator/reviewer and developers that are intended to ensure the translations display correctly, user interfaces function properly, and the non-English content is meaningful and culturally relevant to the user. More detailed guidance is provided in Section 4.3.

### **2.2.2.5. Update**

The update phase occurs after feedback has been garnered during previous phases. Issues flagged during development and testing must be documented and presented to the translator/reviewer for adjudication. Typically, the most senior translator (also known as a language lead) will adjudicate all issues to maintain consistency. This includes adjudication of key terminology. Processes must clearly define the following:

- How will the team resolve conflicts that arise during adjudication (e.g., if the adjudicator disagrees with a critical finding from testing)?

- When and how will additional quality control of updates be completed?
- How will the updated versions be identified within version control?

### **2.2.2.6. *Finalize***

Depending on the results of testing, the translate, develop, and test steps may be completed multiple times before the non-English product is finalized. After adjudication is complete and all final translations are delivered, the team of developers, translators and reviewers will apply the final updates to the product. Subject-matter experts and quality monitors complete final quality checks to ensure the text appears as intended and all required updates have been incorporated. Translators should also do a proofreading of the translations in the final format before publication. More detailed guidance is provided in Section 4.4.

## 3. Working with the Translation Team

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### 3.1. Team Logistics and Communication

Before assigning translation work, schedule a kick-off meeting with the entire translation team. During the kick-off meeting, walk through the workflow, roles and responsibilities, schedule, text for translation, and any special requirements. Encourage all members of your team to ask questions.

As you discuss the workflow and roles and responsibilities, clearly define the work that each member of the team will and will not complete. Translators may have questions regarding how they are involved in the develop, test, and update phases. More specifically, they will likely have questions regarding adjudication and who is allowed to edit translations. Be sure to clarify that only professional translators can edit translations and that all other team members should flag items for adjudication if they see an issue with a translation. If you are working with translation memory and terminology databases, this is also the time to ensure the team understands protocols for receiving, saving, and sending files.

A definitive schedule for each step of the workflow is critical. Work with the translators and use industry standards to ensure the timeframe allotted for translation is sufficient for the length (word count) and complexity of the text. Then, ensure you speak with all other team members to accurately schedule each additional step of the workflow. Don't forget to build in time for each step of the update and finalize phases as adjudication is completed and the translations are updated.

Review the English text for translation with the team to ensure translators have a full understanding of the text and can make the most appropriate choices when working on the translation. Explain how the text was created, the target audience, and the purpose of the text. Describe the goal of the non-English product. Define terminology and concepts in English that are specific to the text. Also, ask translators to flag issues they see with the text that could cause problems with translation. For example, if your text uses the term "middle name," this term may not exist, or have the same meaning if translated literally, in other languages. Resolving issues in advance expedites translations.

Don't forget to review special requirements for the translation, if any. If there is mandatory terminology, formatting instructions, style requirements, or any other items that are necessary to successfully create the translation for your non-English product, this information should be discussed before translation. Review communication protocols at this time as well, and ensure you have a process in place to receive and answer questions from translators.

## 2020 Insights

Translators and reviewers often only work in one language combination, so you may be working with a different person for each translation you need. With enough languages, this can make for a large translation team. Our team for 2020 Census language products included more than 100 people at some points in the process.

As your group gets larger, clear communication becomes incredibly important.

- Encourage everyone to ask questions and document the answers to those questions.
- Schedule regular check-in meetings with translation teams to proactively identify and resolve issues.
- Store important documents and information in a place that is easy to find. This includes source text, requirements, and standards for terminology and style.
- Practice good version control so that changes are easy to identify and understand.

### 3.2. Working with Glossaries and Style Guides

Glossaries and style guides are important aids for the translation team that can increase both the quality and speed of translation. For the 2020 Census, we created language glossaries with key census terms in English and their approved translations. Each glossary was created in one translation direction, from English to one of the 59 non-English languages (example: English to Spanish). We also created style guides that provided guidelines for translators related to grammar, tone, register, and overall style of translations. Glossary use is a translation industry best practice to ensure translators use approved translations for key terminology and use the same translation across all products. Style guide use is also a best practice to ensure overall consistency in the voice and tone of translated text. For more information, review the [2020 Census Language Glossaries](#).

If you do not have an existing glossary or style guide, we recommend you create these products early in the process, before beginning work on other non-English products. For glossaries that provide translations of key English terms, identify and compile those key English terms that are needed to ensure translators understand and translate consistently across products. For example, 2020 Census Language Glossaries included approved translations of the term “interviewer” because these translations were carefully selected to convey approachability and not a more intimidating meaning (e.g., investigator). After the terms are identified, follow the defined translation workflow to translate, review, conduct quality control, test, update, and finalize the glossary for each non-English language. For style guides, work with the translation team to document your approach to translation for each language. Document the style guidance that is appropriate to the way your information is conveyed (e.g., formal, or informal pronouns, use of language variants, capitalization, etc.).

To assist translators in creating a glossary, provide a definition and an example of the term used in the context of your materials for every entry in the glossary. This context will help ensure translators fully understand the term and how it will be used when considering a translation. For more information on best practices when documenting terminology, review the following industry standards:

- ISO 704:2009 Terminology work — Principles and methods
- ISO 12616-1:2021 Terminology work in support of multilingual communication — Part 1: Fundamentals of translation-oriented terminography

Once you finalize and baseline a glossary or style guide, share them with the translation team and communicate that you require translations to adhere to the guidance and terms in these documents. If you use a terminology database, work with your translation technology specialist to incorporate the glossary into the database. If you need to update the glossary or style guide, rebaseline them and ensure that the translation team only uses the most current version. Also, consider updates necessary for previously translated documents if approved translations for key terms have been changed.

### 3.3. Collecting Actionable Feedback

Throughout the workflow, feedback may be provided on translations. Feedback can cause frustration for translators and slow down the translation process if not provided by the appropriate individuals or through a well-defined process. During the kickoff meeting with the translation team, discuss who will provide feedback and when. Define what type of feedback is acceptable, what supporting information is required, the format for feedback, and how decisions will be documented and shared.

Feedback should not be subjective, and only qualified team members should provide feedback. Team members providing feedback must provide objective, authoritative sources that support their feedback. For example, feedback should cite a widely used dictionary or grammar source or existing translations by similar organizations in a similar context. Use a format for feedback that is easy to read and will facilitate decision making. That is, all feedback provided must be clear, concise, and allow an adjudicator to decide “yes” or “no” to implement the feedback.

Below is a sample feedback table that show examples of both low-quality and high-quality feedback:

**Table 2: Examples of Low-Quality and High-Quality Feedback**

Low-Quality Feedback	High-Quality Feedback
This doesn't make sense.	Translation says “... decide to plan the ...” The English text says “... decide to plan FOR the ...” Translation should be ...
Grammatically incorrect.	Suggest replacing the preposition “de” by “sur le” or “à propos du.” The preposition “de” is a preposition of ownership/belonging whereas with “sur ...” or “à propos de ...” you convey that the information is about the subject.
Inefficient phrasing.	Rather than use both the feminine and masculine pronouns, it may be more efficient to use the gender-neutral form “ayudarle.”

The translation team members most likely to provide feedback are those completing quality checks and testing. Translators may receive feedback from people with varying levels of language expertise, including language speakers who are not qualified translators. Adjudicating feedback takes time and should be carefully planned. Make sure everyone on the team understands the role of the translator and reviewer, is aware that translators may not accept their feedback, and is aware of feedback requirements.

Documenting and sharing feedback decisions is critical to ensuring the entire team is aware, feedback is properly implemented, duplicate feedback is not provided, and quick resolution of similar feedback in the future. We recommend using a standardized table format or an automated tool to track and share decisions on feedback. We advise against documenting feedback via individual emails that are difficult to track and share. Below is a sample table format that can be used to collect feedback and allow an adjudicator to document decisions on feedback. This table can be saved and shared with other team members once decisions have been made to implement during the update phase.

**Figure 5: 2020 Census Spanish Translation Feedback Template**

Spanish Translation Feedback							
#	Requested By (Organization/ Person)	File Name	Exact location (Page/Paragraph /Section)	English Text *	Spanish Text*	Proposed Revision*	Justification**
1							
2							

(\*) Please include the entire sentence or phrase for context.

(\*\*) Each proposed revision must include a justification to be considered. The justification should cite an authoritative source and the reason(s) the revision is required. Proposed revisions should be substantive and objective. Individual preferences will not be implemented.

## 2020 Insights

During the translation process, people may try to bypass the translator and reviewer with recommended changes. Typically, these changes fall into two categories:

- Translation feedback from people who speak the language but are not professional translators.
- Small changes, such as a one-word change, that seem too small to involve translators.

Allowing changes to be made without the approval of the translator and reviewer leads to many problems including incorrect and inconsistent translations. Make sure everyone on the team understands the process and the role of the translator and reviewer. Remind them often that **ONLY** the translator and reviewer make changes to translations.

## 4. Creating the Final Product

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### 4.1. Creating a Language Product

Completed translations are often delivered in a text file, and not in their final format (e.g., website, brochure, poster). This means the non-English product developer needs to insert the translation into the required format, and a translator/reviewer needs to review the final version. This review helps identify and correct common errors.

#### 2020 Insights

Below are some specific issues we encountered with inserting translations into the 2020 Census internet questionnaire.

**Text expansion/contraction.** The Russian translations of “Previous” and “Next” were too large to fit on the buttons at the bottom of each screen. The buttons had to be resized.

**Fonts.** The original font we planned to use for Japanese translations made some characters difficult to read. Language experts recommended using an alternative font.

**Programming code.** Adding Arabic text within the programming code sometimes caused the word order to rearrange. Additional programming code had to be added to correct the text direction.

### 4.2. Working with Non-English Product Developers

Providing translations in professional formats often requires working with software developers, graphic designers, editors, and producers who are not familiar with non-English languages. Partner these individuals with a translator/reviewer who can proofread, answer questions, and help troubleshoot any issues in the non-English language. Maintain open lines of communication so that the non-English product developers can proactively raise issues or ask questions.

## 2020 Insights

When the 2020 Census language program created the [2020 Census video language guides](#), it was critical that the audio and visual elements be in sync. However, the producers combining the video and audio files did not speak all 59 languages and were not able to confirm that the video and audio were synchronized.

After troubleshooting the problem with the team, we developed an approach that would help producers prevent synchronization errors from occurring. The scripts were divided into 131 sections that aligned with changes on screen. Then, audio was recorded in matching sections, as 131 separate files per language. This helped producers accurately pair the audio with the video. After implementing this process, and reviewing the video, language experts found few errors and were able to focus on small improvements (instead of correcting critical issues).

### 4.3. Testing Translations and Language Products

Before you finalize your language product, test it with a diverse group of individuals that represents your intended audience. This helps ensure the product will be understood by the people it is designed to reach. Testing methods vary based on the kind of product you are creating. For simple products, reviewing the draft with a small group of potential users may be sufficient. Complex products will need to be tested through a combination of scientific and technical methods.

## 2020 Insights

To validate that the 2020 Census translations were accurate and conveyed the intended meaning, the 2020 Census translations were extensively tested using the three techniques below:

- **Expert review.** Translations were reviewed by experts in both survey methodology and the relevant language.
- **Cognitive testing.** Translations were tested with recruited respondents of diverse demographics who also spoke various dialects of the non-English languages. Participants used translations to provide responses to census questions. The researcher asked them to think aloud and asked probing questions to help identify places where the individual did not fully understand the translation as intended.
- **Usability testing.** Translated questionnaires were used by recruited respondents of diverse demographics who also spoke various dialects of the non-English languages. Researchers observed the participant to identify places where the person did not understand the translation or needed additional information or guidance.

If you consider incorporating this type of testing, we recommend engaging experienced researchers who have professional experience conducting these types of testing in the languages required for your project.

Both robust quality control and testing are needed to identify issues. Quality control helps find errors, and testing helps ensure that members of the target audience understand the translations. For example, quality control processes can identify places where Arabic text is not properly aligned right-to-left, but testing will identify content that your audience would prefer to see aligned left-to-right, such as U.S. phone numbers.

Finally, it is critical that researchers make recommendations and not change the actual translations. Researcher recommendations should be sent to professional translators for adjudication. Similar to the guidance in Section 3.3 these recommendations should describe the issues observed, provide clear recommendations, and cite authoritative sources.

## **4.4. Finalizing a Language Product**

Final translation updates should receive the same attention as previous translations. That is, following the translation update, reviewers should ensure the final translations are accurate and meet requirements. The team should ensure the final translations have been inserted into the final format correctly, and translators and reviewers should ensure no other changes are needed to that final format.

As a concluding step, all requirements should be reviewed to ensure they have been met. This process, known as user acceptance testing, can be scaled to match the complexity of the product. For example, a simple translated document may only need to be spell-checked and proofread, while a complex website may need a team of testers to check links, review menus, and proofread page text.

When a team of testers conducts final user acceptance testing, ensure all testers have a clear understanding of which aspects of the product they are individually responsible for checking. We recommend using standardized documents to assign testing responsibilities and to collect testing feedback. This documentation helps ensure everything is verified, duplicate feedback is not provided, and errors are quickly resolved.

Once the product is final and has been made available to your audience, carefully organize and archive the final translations and documentation (including final translation memories and termbases). Reviewing these files and documentation before your next project begins may help improve and refine future plans, processes, tools, and products.

## 5. Conclusion and Recommended Resources

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This handbook shared the best practices and recommendations implemented at the Census Bureau, based on the experience of developing public-facing language products for the 2020 Census. These detailed guidelines were intended to inform those seeking to build or improve upon their language programs. Below is a summary of recommendations based on the approaches that had the greatest impact on the 2020 Census Language Program:

1. **Centralize translation work within a core team of professional translation project managers, translators, and reviewers.** Centralizing all translation work in one area ensures standardized approaches are applied to all translation projects, which improves consistency and quality.
2. **Thoroughly plan the product before work begins.** Ensuring a detailed plan is in place improves efficiency, quality, and communication; and reduces errors, changes, and rework. When possible, plans should be informed by data, research, and findings/results from previous projects.
3. **Design processes based on translation industry standards.** Important minimum components will include planning, translation, review, and quality control. If additional steps are included, ensure translators and reviewers are engaged in those processes, and ensure quality is measured within each step.
4. **Maintain open communication.** Clearly communicate expectations and encourage all team members to ask questions.
5. **Test translations and products.** Test the draft translations or product with a small group that represents your target audience to confirm the product will be useful and understandable.
6. **Thoroughly review all final products.** All team members, but especially translators and reviewers, should review the final product to ensure translations were inserted correctly, and all requirements have been met.

We look forward to adding additional best practices to this list as we work to refine the language program in preparation for the 2030 Census. We also look forward to learning from the experiences of practitioners in industries and organizations beyond the Census Bureau. For readers interested in additional information, we have provided a list of recommended resources below.

### 5.1. Further Reading and Resources

#### 2020 Census Language Resources

<<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/count/language-resources.html>>

Includes:

- *Memorandum 2018.06: 2020 Census Non-English Language Support*  
<[https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/memo-series/2020-memo-2018\\_06.html](https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/memo-series/2020-memo-2018_06.html)>
- 2020 Census Video Language Guides

<<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/count/language-resources/language-guides-videos.html>>

- 2020 Census Print Language Guides  
<<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/count/language-resources/language-guides.html>>
- 2020 Census Language Glossaries  
<<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/count/language-resources/language-glossaries.html>>

### **Executive Order 13166—Improving Access to Services for Persons with Limited English Proficiency**

<<https://www.justice.gov/sites/default/files/crt/legacy/2010/12/14/eolep.pdf>>

### **GSA Multilingual Community of Practice on Digital.gov**

<<https://digital.gov/communities/multilingual/>>

Includes:

- Bilingual Glossaries, Dictionaries, and Style Guides available at  
<<https://digital.gov/resources/bilingual-glossaries-dictionaries-style-guides/#government-bilingual-glossaries>>

### **Select Translation and Terminology Standards**

- ASTM F2575 – 14 Standard Guide for Quality Assurance in Translation  
<<https://www.astm.org/Standards/F2575.htm>>
- ISO 17100:2015 Translation services — Requirements for translation services  
<<https://www.iso.org/standard/59149.html>>
- ISO 704:2009 Terminology work — Principles and methods  
<<https://www.iso.org/standard/38109.html>>
- ISO 12616-1:2021 Terminology work in support of multilingual communication — Part 1: Fundamentals of translation-oriented terminography  
<<https://www.iso.org/standard/72308.html>>

### **U.S. Census Bureau Language Data**

- Language Tables from the American Community Survey  
<<https://data.census.gov/cedsci/all?q=language%20spoken>>
- Language Use data information  
<<https://www.census.gov/topics/population/language-use.html>>

### **U.S. Census Bureau Working Papers—Research Report Series**

<<https://www.census.gov/library/working-papers/series/rsm-wp.2019.html>>

Includes:

- Goerman, P., Meyers, M., & García Trejo, Y. (2018). “The Place of Expert Review in Translation and Questionnaire Evaluation for Hard-to-Count Populations in National Surveys”  
<<https://www.census.gov/library/working-papers/2019/adrm/rsm2019-02.html>>